

4



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,944	04/12/2001	David B. Dwyer	H0002046	3235
128	7590	09/08/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			AMINI, JAVID A	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/833,944

Applicant(s)

DWYER ET AL.

Examiner

Javid A. Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

H

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/18/2005 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-27 rejected under 35 U.S.C. 103(a) as being unpatentable over May US 6,614,419 B1, and further in view of Jean-Daniel Fekete, Michel Beaudouin-Lafon November 1996 hereinafter refers as Fekete.

1. Claim 10.

“An apparatus for displaying a plurality of data categories, comprising” May at col. 2, lines 29-33 teaches that the work relates to multifunctional displays and, in particular, to labeling functional control keys of multifunctional displays. The following step is “a display that is configured to produce a first visual representation of a first data category of the plurality of data categories and a second visual representation of a second data category of said plurality of data categories”, Similarly, May in fig. 6B illustrates a topographical mode i.e. TOPO step 14, which can be considered as a second visual representation and preferably, Navigation mode 12 is

Art Unit: 2672

considered as a first visual representation that is always overlaid either of Weather Radar mode 16 and StormScope mode 18, if a route or "GOTO" is active. The step of "a processor that is configured to control said display to present said first visual representation of said first data category superimposed over said second visual representation of said second data category such that the first visual representation masks said second visual representation in a first common region of said first visual representation and said second visual representation, said processor further configured to receive data representative of a predefined event and, upon receipt thereof, to superimpose said second visual representation of said second data category over said first visual representation of said first data category such that the second visual representation masks said first visual representation in said first common region." May at col. 4, lines 22-33 teaches that when the invention is practiced in multiple different but complementary avionics operational modes, each operational mode is operated by a separate processor board containing a microprocessor, memory and input/output interface, each said processor board operating operational mode software; and a video data bus interconnects each said separate processor board under the control of a system superintendent. Preferably, the system superintendent is one of the various separate processor boards, for example, the navigation operational mode processor board. But May is silence about using a multi-layer model to represent better graphic objects on a display; however, Fekete covers the multi-layer model for building interactive graphical applications e.g. present invention's methods and apparatus for displaying multiple data categories. Fekete in fig. 2 illustrates a good example of stack of layers, that each layer can be considered as a first visual layer representation and the second layer can be considered as a second visual layer representation, and so on. Fekete on page 110, section 2.1 under "graphic Models" covers a wide variety of graphic models. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Art Unit: 2672

Fekete's stack of layers incorporating them into the first reference in fig. 1A that can be indicated as an extra mode "all mode" meaning to have all the layers, since the reference May implemented a multifunctional display labeled according to particular function to display information to the pilot.

2. Claim 11.

See rejection of claim 10 that covers more than two layers.

3. Claim 12.

"The apparatus of Claim 11, wherein said display is configured to produce a fourth visual representation of a fourth data category of the plurality of data categories and said processor is configured to control said display to present said first visual representation of said first data category superimposed over said fourth visual representation of said fourth data category such that the first visual representation masks said fourth visual representation in a fourth common region of said first visual representation and said fourth visual representation, said processor further configured to and superimpose said fourth visual representation of said fourth data category over said first visual representation of said first data category such that the fourth visual representation masks said first visual representation in said fourth common region if a third predefined event is identified by said processor", the rejection is similar to the rejection of claim 11.

4. Claim 13.

"The apparatus of Claim 10, wherein said plurality of data categories are vehicle data categories", The step would have been obvious to a person skill in the art, because instead of using an aircraft, one can use a vehicle.

5. Claim 14.

Art Unit: 2672

“The apparatus of Claim 10, wherein said plurality of data categories are aircraft data categories”, the step would have been obvious to a person skill in the art, because the image of plurality of data categories in the first reference is aircraft.

6. Claim 15.

“The apparatus of Claim 10, wherein said display is a Multi-Function Display (MFD)”, see May in fig. 1A illustrates the limitations.

7. Claim 16.

“The apparatus of Claim 10, wherein said first data category is sensor data”, the step would have been obvious to a person skill in the art, because the NAV and TOPO modes are considered as sensor data.

8. Claim 17.

“The apparatus of Claim 10, wherein said second data category is navigation data”, the step would have been obvious to a person skill in the art, because the NAV mode in fig. 1A is considered as navigation data.

9. Claim 18.

The rejection is similar to the rejection of claim 10. The first color can be considered as May's fig. 1A NAV mode i.e. considered as a first priority in the reference, and the second color can be considered as TOPO mode. Applicant needs to be more specific about the claim languages.

10. Claim 19.

“The apparatus of Claim 18, wherein said first color difference is greater than about ninety (90). As the second reference Fekete teaches on page 110 under 2.1 graphical models. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fekete's stack of layers incorporating them into the first reference in fig. 1A that can be indicated as an extra mode “all mode” meaning to have all the layers, since the reference May implemented a

Art Unit: 2672

multifunctional display labeled according to particular function to display information to the pilot.

11. Claim 20.

“The apparatus of Claim 18, wherein said first color difference is greater than about one hundred (100)”.

As the second reference Fekete teaches on page 110 under 2.1 graphical models. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fekete’s stack of layers incorporating them into the first reference in fig. 1A that can be indicated as an extra mode “all mode” meaning to have all the layers, since the reference May implemented a multifunctional display labeled according to particular function to display information to the pilot.

12. Claim 21.

“The apparatus of Claim 18, wherein said second color difference is less than about ninety (90)”.

As the second reference Fekete teaches on page 110 under 2.1 graphical models. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fekete’s stack of layers incorporating them into the first reference in fig. 1A that can be indicated as an extra mode “all mode” meaning to have all the layers, since the reference May implemented a multifunctional display labeled according to particular function to display information to the pilot.

13. Claim 22.

“The apparatus of Claim 18, wherein said second color difference is less than about one hundred (100)”, As the second reference Fekete teaches on page 110 under 2.1 graphical models. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fekete’s stack of layers incorporating them into the first reference in fig. 1A that can be

Art Unit: 2672

indicated as an extra mode “all mode” meaning to have all the layers, since the reference May implemented a multifunctional display labeled according to particular function to display information to the pilot.

14. Claim 23.

“The apparatus of Claim 18, wherein said plurality of data categories are vehicle data categories”. See rejection of the claim 13 that applies to this claim.

15. Claim 24.

“The apparatus of Claim 18, wherein said plurality of data categories are aircraft data categories”, See rejection of claim 14.

16. Claim 25.

“The apparatus of Claim 18, wherein said display is a Multi-Function Display (MFD)”. See rejection of claim 15.

17. Claim 26.

“The apparatus of Claim 18, wherein said first data category is sensor data”, the step would have been obvious to a person skill in the art, because any data can be considered as sensor data. See also rejection of claim 16.

18. Claim 27.

“The apparatus of Claim 18, wherein said second data category is navigation data”, See rejection of claim 17.

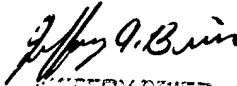
Art Unit: 2672

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JEFFERY BRER
PRIMARY EXAMINER

Javid A Amini
Examiner
Art Unit 2672

Javid Amini